

AMENDMENTS TO THE CLAIMS

This listing replaces all prior versions and listings of claims in the application.

Listing of Claims

1. (Withdrawn) A method of storing and administering storage unstable, therapeutic and nutritional agents for targeted delivery to predetermined locations in the gastro intestinal tract which includes the steps of encapsulating the storage unstable, therapeutic and nutritional agents in an encapsulant formed by combining a food grade treated carbohydrate with a water soluble food grade protein.
2. (Withdrawn) A method as defined in claim 1 in which the carbohydrate material is treated to make emulsions of the encapsulant material stable and to increase the number of sugar reducing groups in the carbohydrate.
3. (Withdrawn) A method as defined in claim 1 in which the carbohydrate is selected from those containing reducing sugar groups, oligosaccharides, raw, modified, resistant, acetylated, proprionylated and butylated starches.
4. (Withdrawn) A method as defined in claim 1 or 3 in which the protein is selected from milk proteins including casein and whey proteins.
5. – 8. (Canceled)
9. (Withdrawn) An orally administrable nutritional or therapeutic product for delivery of a nutritional or therapeutic agent to the gastrointestinal tract in which the agent includes an oil or an oil soluble or dispersible component which is encapsulated in a material as claimed in claim 5.

10. (Withdrawn) A method of preparing a nutritional or therapeutic product as defined in claim 9 which includes the steps

- a) selecting a nutritional or therapeutic oil, oil soluble or oil dispersible nutritional or therapeutic agent
- b) dispersing a water soluble film forming protein and a treated carbohydrate in the aqueous phase
- c) mixing component (a) with component (b) and homogenizing the mixture to obtain an emulsion
- d) optionally drying the emulsion to obtain a powdered formulation in which the nutritional or therapeutic oil or agent is surrounded by the component (b).

11. (Withdrawn) A method as defined in claim 10 in which the water soluble film forming protein is selected from milk proteins including casein and whey proteins.

12. (Withdrawn) A method as defined in claim 10 in which the carbohydrate material is treated to make emulsions of the encapsulant material stable and to increase the number of sugar reducing groups in the carbohydrate.

13. (Withdrawn) A method as defined in claim 10 in which the carbohydrate material is selected from those containing reducing sugar groups, oligosaccharides, raw, modified, resistant, acetylated, propionylated and butylated starches.

14. (Withdrawn) A method as defined in claim 13 in which the water soluble film forming protein is selected from milk proteins including casein and whey proteins.

15. – 18. (Canceled)

19. (New) A material for encapsulating a therapeutic and nutritional agent, which is storage unstable, the material comprising:

(A) a pre-processed starch; and

(B) a film forming protein,

wherein the pre-processed starch and the film forming protein form a protective shell, around the therapeutic and nutritional agent, that allows release of the therapeutic and nutritional agent in the gastrointestinal tract.

20. (New) The material of claim 19, wherein the pre-processed starch comprises resistant or non-resistant starch.

21. (New) The material of claim 20, wherein the pre-processed resistant starch comprises Hylon, Novelose, Capsul, Hi-Cap, or Hi-Maize.

22. (New) The material of claim 20, wherein the pre-processed non-resistant starch comprises waxy maize or wheat starch.

23. (New) The material of claim 19, wherein the film forming protein includes milk proteins.

24. (New) The material of claim 19, wherein the therapeutic and nutritional agent comprises at least one of lipids, oil soluble and oil dispersible ingredients.

25. (New) An encapsulated therapeutic and nutritional agent, which is storage unstable, that is encapsulated by an encapsulating material, wherein the encapsulating material comprises:

(A) a pre-processed starch; and

(B) a film forming protein,

wherein the encapsulated therapeutic and nutritional agent is formed by dispersing an oil phase containing the therapeutic and nutritional agent into an aqueous phase containing the encapsulating material to form an oil in water emulsion and

wherein the encapsulating material allows release of the therapeutic and nutritional agent in the gastrointestinal tract.